

=> fil reg

FILE 'REGISTRY' ENTERED AT 11:24:13 ON 11 JUL 2007

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STRUCTURE FILE UPDATES: 10 JUL 2007 HIGHEST RN 942116-98-5

DICTIONARY FILE UPDATES: 10 JUL 2007 HIGHEST RN 942116-98-5

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH December 2, 2006

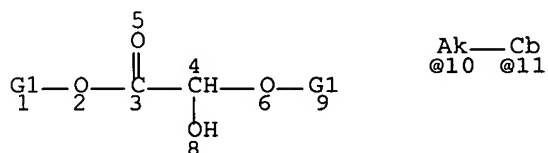
Please note that search-term pricing does apply when conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

<http://www.cas.org/support/stngen/stndoc/properties.html>

=> d sta que l38

L36 STR



VAR G1=AK/CB/10/11

NODE ATTRIBUTES:

DEFAULT MLEVEL IS ATOM

DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED

NUMBER OF NODES IS 10

STEREO ATTRIBUTES: NONE

L38 43 SEA FILE=REGISTRY CSS FUL L36

100.0% PROCESSED 66124 ITERATIONS

43 ANSWERS

SEARCH TIME: 00.00.01

=> d his

(FILE 'HOME' ENTERED AT 10:05:01 ON 11 JUL 2007)

SET COST OFF

FILE 'HCAPLUS' ENTERED AT 10:09:49 ON 11 JUL 2007

L1           E DSM IP/PA,CS  
           762 S E1-E20  
           E DSM IP/CO  
 L2           761 S E4-E7  
           E E5+ALL  
           E DSM/PA,CS  
 L3           6845 S E3,E4 OR DSM?/PA,CS  
           E VAN BENTHEM/AU  
 L4           42 S E24,E30-E32  
           E VANBENTHEM/AU  
           E BENTHEM/AU  
 L5           1 S US20070092726/PN OR (US2005-560212# OR WO2004-NL412 OR EP2003  
 L6           1 S L1-L4 AND L5  
 L7           41 S L4 NOT L6  
           SEL RN L6

FILE 'REGISTRY' ENTERED AT 10:18:18 ON 11 JUL 2007

L8           4 S E1-E4

FILE 'HCAPLUS' ENTERED AT 10:18:39 ON 11 JUL 2007

L9           TRA L7 1- RN :           134 TERMS

FILE 'REGISTRY' ENTERED AT 10:18:41 ON 11 JUL 2007

L10          134 SEA L9  
 L11          26 S L10 AND (N AND O)/ELS AND N>=2  
 L12          1 S L11 AND CH4N2O/MF  
 L13          1 S L11 AND "(C3H6N6.CH4N2O.CH2O)X"/MF  
 L14          1 S L11 AND "(CH4N2O.CH2O)X"/MF  
 L15          1 S L11 AND "(C3H6N6.CH2O)X"/MF  
 L16          1 S GUANIDINE/CN  
 L17          5 S (MELAM OR MELEM OR AMMELINE OR AMMELIDE OR UREIDOMELAMINE)/CN  
 L18          10 S L12-L17  
 L19          1 S MELAMINE/CN  
 L20          11 S L18,L19  
           E GLYOXLILIC ACID/CN  
           E GLYOXYLIC ACID/CN  
 L21          1 S E3  
           E DIMETHOXYACETALDEHYDE/CN  
 L22          1 S E3  
           E DIETHOXYACETALDEHYDE/CN  
 L23          1 S E3  
           E ETHYLGLYOXYLATE/CN  
           E ETHYL GLYOXYLATE/CN  
 L24          1 S E3  
           E BUTYL GLYOXYLATE/CN  
 L25          1 S E3  
           E O-PHTHALALDEHYDE/CN  
 L26          1 S E3  
           E GLYOXYLIC ACID HYDRATE/CN  
 L27          1 S E3  
           E CHLORAL HYDRATE/CN  
 L28          1 S E3  
           E GLYOXAL HYDRATE/CN  
 L29          1 S E3  
           E METHYL GLYOXYLATE/CN  
 L30          1 S E11  
           E ETHYL GLYOXYLATE/CN  
 L31          1 S E5  
           E BUTYL GLYOXYLATE/CN  
           E BUTYLGLYOXYLATE/CN

E ISOPROPYL GLYOXYLATE/CN  
 E PROPYL GLYOXYLATE/CN  
 E CYCLOHEXYL GLYOXYLATE/CN  
 E ETHYL GLYOXYLATE/CN  
 L32 1 S E3  
 E BUTYL GLYOXYLATE/CN  
 L33 1 S E3  
 L34 2 S 922-68-9 OR 19757-97-2  
 L35 12 S L21-L34  
 L36 STR  
 L37 0 S L36 CSS SAM  
 L38 43 S L36 CSS FUL  
 SAV L38 FREE560A/A  
 L39 40 S L38 AND 1/NC  
 L40 50 S L35,L39  
 SAV L40 FREE560B/A  
 L41 3 S L38 NOT L39  
 L42 2 S L41 AND N/ELS  
 SEL RN L40  
 L43 464 S E1-E50/CRN  
 SEL RN L20  
 L44 16453 S E51-E61/CRN  
 L45 26 S L43 AND L44  
 SEL RN 3 4 6 11 17-19 22 24 26  
 L46 10 S E62-E71  
 L47 11 S L10 AND L20  
 L48 2 S L10 AND L43  
 L49 7 S L10 AND L44  
 L50 8 S L48,L49  
 L51 7 S L50 AND N/ELS  
 L52 6 S L51 NOT L46  
 L53 1 S L10 AND L46

FILE 'HCAPLUS' ENTERED AT 11:10:14 ON 11 JUL 2007

L54 13 S L46  
 L55 305 S L20 AND L40  
 L56 1 S L54 AND PY<=2003 NOT P/DT  
 L57 9 S L54 AND (PD<=20030613 OR PRD<=20030613 OR AD<=20030613) AND P  
 L58 0 S L57 AND B01J/IPC, IC, ICM, ICS  
 L59 0 S L57 AND A61J/IPC, IC, ICM, ICS  
 L60 0 S L57 AND ?CAPSUL?  
 L61 1 S L1-L7 AND L54  
 L62 10 S L56,L57,L61  
 L63 1 S L55 AND L1-L7  
 L64 7 S L55 AND B01J/IPC, IC, ICM, ICS  
 L65 1 S L55 AND A61J/IPC, IC, ICM, ICS  
 L66 6 S L55 AND ?CAPSUL?  
 E ENCAPSUL/CT  
 L67 36849 S E4+OLD,NT,PFT,RT OR E6+OLD,NT,PFT,RT OR E11+OLD,NT,PFT,RT OR  
 E E11+ALL  
 L68 2 S L55 AND L67  
 L69 10 S L63-L66,L68  
 L70 1 S L69 AND PY<=2003 NOT P/DT  
 L71 8 S L69 AND (PD<=20030613 OR PRD<=20030613 OR AD<=20030613) AND P  
 L72 9 S L70,L71  
 SEL AN 3 6 7  
 L73 6 S L72 NOT E1-E6  
 L74 106 S L55 AND L20 (L) RACT+NT/RL AND L40 (L) RACT+NT/RL  
 L75 2 S L74 AND L73  
 L76 6 S L73,L75

L77 35 S L74 AND PY<=2003 NOT P/DT  
 L78 49 S L74 AND (PD<=20030613 OR PRD<=20030613 OR AD<=20030613) AND P  
 L79 84 S L77,L78  
 L80 0 S L79 AND L67  
 SEL RN L76 3 4

FILE 'REGISTRY' ENTERED AT 11:23:01 ON 11 JUL 2007  
 L81 19 S E7-E25

FILE 'HCAPLUS' ENTERED AT 11:23:39 ON 11 JUL 2007  
 SEL AN L76 3 4  
 L82 4 S L76 NOT E26-E29  
 L83 14 S L62,L82

FILE 'REGISTRY' ENTERED AT 11:24:13 ON 11 JUL 2007

=> fil hcaplus

FILE 'HCAPLUS' ENTERED AT 11:24:40 ON 11 JUL 2007  
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FILE COVERS 1907 - 11 Jul 2007 VOL 147 ISS 3  
 FILE LAST UPDATED: 10 Jul 2007 (20070710/ED)

New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file contains CAS Registry Numbers for easy and accurate substance identification.

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L83 ANSWER 1 OF 14 HCAPLUS COPYRIGHT 2007 ACS on STN  
 AN 2005:141200 HCAPLUS Full-text  
 DN 142:254568  
 TI Methods and compositions for increasing the efficacy of  
 biologically-active ingredients such as antitumor agents  
 IN Windsor, J. Brian; Roux, Stan J.; Lloyd, Alan M.; Thomas, Collin E.  
 PA Board of Regents, the University of Texas System, USA  
 SO PCT Int. Appl., 243 pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA English  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2005014777	A2	20050217	WO 2003-US32667	20031016 <--
	WO 2005014777	A3	20050915		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,

CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE,  
 GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK,  
 LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ,  
 OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM,  
 TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW  
 RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,  
 KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES,  
 FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR,  
 BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

CA 2502148 A1 20050217 CA 2003-2502148 20031016 <--  
 AU 2003304398 A1 20050225 AU 2003-304398 20031016 <--  
 EP 1576150 A2 20050921 EP 2003-816736 20031016 <--  
 EP 1576150 A3 20051102

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,  
 IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK

US 2006276339 A1 20061207 US 2006-531744 20060123 <--  
 PRAI US 2002-418803P P 20021016 <--  
 WO 2003-US32667 W 20031016

AB The invention provides methods and compns. for modulating the sensitivity of  
 cells to cytotoxic compds. and other active agents. In accordance with the  
 invention, compns. are provided comprising combinations of ectophosphatase  
 inhibitors and active agents. Active agents include antibiotics, fungicides,  
 herbicides, insecticides, chemotherapeutic agents, and plant growth  
 regulators. By increasing the efficacy of active agents, the invention allows  
 use of compns. with lowered concns. of active ingredients.

IC ICM C12N  
 CC 1-6 (Pharmacology)  
 IT Gelatins, biological studies  
 RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL  
 (Biological study); USES (Uses)  
 (capsules; methods and compns. for increasing efficacy of  
 biol. active ingredients such as antitumor agents)

IT 50-00-0, Formaldehyde, biological studies 50-07-7 50-18-0 50-29-3,  
 biological studies 50-44-2 50-70-4, D-Glucitol, biological studies  
 50-76-0, Actinomycin D 50-79-3 50-91-9 50-99-7, D-Glucose,  
 biological studies 51-21-8 51-28-5, biological studies 51-36-5  
 52-24-4 52-68-6 52-85-7 52-90-4, L-Cysteine, biological studies  
 53-03-2 53-19-0 53-41-8 54-11-5 54-64-8 55-38-9 55-68-5  
 55-98-1 56-23-5, biological studies 56-35-9 56-36-0 56-38-2  
 56-53-1 56-72-4 56-75-7 57-06-7 57-09-0 57-13-6, Urea,  
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 57-50-1, biological studies 57-63-6 57-85-2 58-27-5 58-36-6  
 58-89-9 59-05-2 59-30-3D, analogs, biological studies 59-50-7  
 59-87-0 60-00-4, biological studies 60-12-8, Benzeneethanol 60-51-5  
 60-57-1 61-73-4 62-38-4 62-53-3, Benzenamine, biological studies  
 62-73-7 62-76-0 63-25-2 63-42-3 64-00-6 64-02-8 64-17-5,  
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 67-48-1 67-56-1, Methanol, biological studies 67-63-0, 2-Propanol,  
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 71-58-9 71-63-6 72-20-8 72-43-5 72-54-8 72-55-9, biological  
 studies 74-82-8D, Methane, triaryl derivs. 74-83-9, biological studies  
 74-85-1, Ethene, biological studies 74-87-3, biological studies  
 74-88-4, biological studies 74-90-8, Hydrocyanic acid, biological  
 studies 74-96-4 74-98-6, Propane, biological studies 75-00-3  
 75-05-8, Acetonitrile, biological studies 75-07-0, Acetaldehyde,  
 biological studies 75-08-1, Ethanethiol 75-09-2, biological studies  
 75-15-0, Carbon disulfide, biological studies 75-20-7, Calcium carbide

(Ca(C2)) 75-21-8, Oxirane, biological studies 75-28-5 75-31-0,  
 2-Propanamine, biological studies 75-35-4, biological studies 75-37-6  
 75-43-4 75-45-6 75-52-5, biological studies 75-56-9, biological  
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 76-13-1 76-22-2 76-43-7 76-44-8 76-73-3 76-87-9 77-47-4  
 77-48-5 77-73-6 77-92-9D, copper complexes 77-98-5 78-21-7  
 78-34-2 78-40-0 78-48-8 78-53-5 78-57-9 78-70-6 78-78-4  
 78-83-1, biological studies 78-87-5 78-90-0D, 1,2-Propanediamine,  
 1-alkyl derivs., salts 78-92-2, 2-Butanol 78-93-3, 2-Butanone,  
 biological studies 79-00-5 79-01-6, biological studies 79-08-3  
 79-09-4, Propanoic acid, biological studies 79-10-7, 2-Propenoic acid,  
 biological studies 79-11-8, biological studies 79-21-0, Ethaneperoxoic  
 acid 79-24-3 79-31-2 79-43-6, biological studies 79-46-9  
 80-05-7, biological studies 80-13-7 80-33-1 80-46-6 80-56-8  
 80-57-9 80-62-6 80-71-7 81-81-2 81-82-3 81-84-5,  
 1H,3H-Naphtho[1,8-cd]pyran-1,3-dione 81-88-9 82-66-6 82-68-8  
 83-26-1 83-28-3 83-79-4 84-62-8 84-66-2 84-74-2 85-00-7  
 85-34-7 85-68-7 85-86-9 85-97-2 86-50-0 86-85-1 86-86-2,  
 1-Naphthaleneacetamide 86-87-3, 1-Naphthaleneacetic acid 87-17-2  
 87-41-2, 1(3H)-Isobenzofuranone 87-44-5 87-47-8 87-51-4,  
 1H-Indole-3-acetic acid, biological studies 87-86-5 87-90-1 88-04-0  
 88-06-2 88-85-7 89-68-9 89-83-8 90-03-9 90-43-7,  
 [1,1'-Biphenyl]-2-ol 91-44-1 91-64-5, 2H-1-Benzopyran-2-one 92-04-6  
 93-71-0 93-76-5 93-76-5D, alkylamine salts 93-78-7 93-79-8  
 93-80-1 94-13-3 94-26-8 94-43-9 94-59-7 94-62-2 94-75-7,  
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 95-50-1 95-57-8 95-95-4 96-12-8 96-29-7 97-11-0 97-17-6  
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 97-99-4 98-01-1, 2-Furancarboxaldehyde, biological studies 98-09-9,  
 Benzenesulfonyl chloride 98-11-3D, Benzenesulfonic acid, C10-13-alkyl  
 derivs., sodium salts 98-11-3D, Benzenesulfonic acid, alkyl derivs.,  
 potassium salts 98-11-3D, Benzenesulfonic acid, para-C9-13 alkyl  
 derivs., sodium salts 98-50-0 98-54-4 98-82-8 98-86-2, biological  
 studies

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL  
 (Biological study); USES (Uses)

(methods and compns. for increasing efficacy of biol. active  
 ingredients such as antitumor agents)

IT 142-87-0 143-18-0 143-28-2 143-33-9, Sodium cyanide (Na(CN))  
 143-50-0 144-21-8 144-41-2 144-55-8, Carbonic acid monosodium salt,  
 biological studies 144-62-7, Ethanedioic acid, biological studies  
 145-73-3 145-73-3D, di-(N,N-dimethylcocoamine) salts 145-73-3D, mono-  
 and di-(N,N-diethylalkylamine) and mono- and di-(N,N-dimethylalkylamine)  
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 150-68-5 150-84-5 151-21-3, biological studies 151-38-2 151-41-7D,  
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 1,7-Dioxaspiro[5.5]undecane 262-12-4D, Dibenzo[b,e][1,4]dioxin, chloro  
 derivs. 288-88-0, 1H-1,2,4-Triazole 289-95-2D, Pyrimidine, analogs  
 290-87-9, 1,3,5-Triazine 297-97-2 298-00-0 298-01-1 298-02-2  
 298-03-3 298-04-4 298-06-6 298-14-6 299-84-3 300-76-5 301-04-2  
 301-12-2 302-01-2, Hydrazine, biological studies 305-03-3 309-00-2  
 311-45-5 314-40-9 314-42-1 315-18-4 317-83-9 319-84-6 319-85-7  
 327-98-0 328-04-1 329-21-5 330-54-1 330-55-2 330-64-3 333-20-0  
 333-40-4 333-41-5 333-43-7 334-48-5, Decanoic acid 338-45-4  
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 471-34-1, Carbonic acid calcium salt (1:1), biological studies 475-26-3  
 485-31-4 497-19-8, Carbonic acid disodium salt, biological studies

499-75-2 500-28-7 502-39-6 506-87-6 507-60-8 509-34-2 512-42-5  
 513-77-9 513-78-0 513-92-8 515-42-4 515-83-3 517-16-8 518-47-8  
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 540-72-7 540-73-8 541-31-1 542-75-6 544-60-5 546-93-0 548-62-9  
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 563-47-3 563-63-3 569-64-2 571-58-4 572-48-5 578-94-9 580-48-3  
 584-08-7 584-79-2 588-66-9 590-28-3 592-01-8, Calcium cyanide  
 (Ca(CN)<sub>2</sub>) 593-29-3 594-30-9 595-33-5 598-02-7 603-33-8  
 607-12-5 608-73-1 624-83-9 628-63-7 629-25-4 630-56-8 634-66-2  
 637-03-6 637-12-7 639-58-7 640-15-3 643-79-8,  
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 671-04-5 671-16-9 672-04-8 673-04-1 682-80-4 683-18-1 709-98-8  
 732-11-6 741-58-2 756-09-2 759-94-4 786-19-6 811-97-2 813-78-5  
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 biological studies 886-50-0 900-95-8 919-44-8 919-54-0 919-76-6  
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 1172-63-0 1184-57-2 1184-64-1 1186-49-8 1191-17-9 1191-50-0  
 1191-80-6 1193-18-6 1194-65-6 1300-34-1 1300-71-6 1300-72-7  
 1300-78-3 1301-96-8, Silver oxide (Ag<sub>2</sub>O) 1302-42-7 1303-28-2, Arsenic  
 oxide (As<sub>2</sub>O<sub>5</sub>) 1303-33-9, Arsenic sulfide (As<sub>2</sub>S<sub>3</sub>) 1303-86-2, Boron  
 oxide (B<sub>2</sub>O<sub>3</sub>), biological studies 1303-96-4, Borax (B<sub>4</sub>Na<sub>2</sub>O<sub>7</sub>·10H<sub>2</sub>O)

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL  
 (Biological study); USES (Uses)

(methods and compns. for increasing efficacy of biol. active  
 ingredients such as antitumor agents)

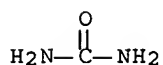
IT 57-13-6, Urea, biological studies 643-79-8,  
 1,2-Benzenedicarboxaldehyde 645-92-1

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL  
 (Biological study); USES (Uses)

(methods and compns. for increasing efficacy of biol. active  
 ingredients such as antitumor agents)

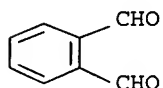
RN 57-13-6 HCAPLUS

CN Urea (CA INDEX NAME)



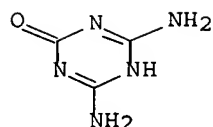
RN 643-79-8 HCAPLUS

CN 1,2-Benzenedicarboxaldehyde (CA INDEX NAME)



RN 645-92-1 HCAPLUS

CN 1,3,5-Triazin-2(1H)-one, 4,6-diamino- (CA INDEX NAME)



L83 ANSWER 2 OF 14 HCAPLUS COPYRIGHT 2007 ACS on STN

AN 2004:1127242 HCAPLUS Full-text

DN 142:57805

TI **Encapsulated materials**

IN Van Benthem, Rudolfus Antonius Theodorus Maria

PA DSM IP Assets, B.V., Neth.

SO PCT Int. Appl., 15 pp.

CODEN: PIXXD2

DT **Patent**

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE	
PI	WO 2004110614	A1	20041223	WO 2004-NL412	20040610 <--	
	W:			AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW		
	RW:			BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG		
	EP 1633472	A1	20060315	EP 2004-748644	20040610 <--	
	R:			AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK		
	CN 1802202	A	20060712	CN 2004-80015865	20040610 <--	
	US 2007092726	A1	20070426	US 2005-560212	20051209 <--	
PRAI	EP 2003-76842	A	20030613	<--		
	WO 2004-NL412	W	20040610	<--		

OS MARPAT 142:57805

AB The invention relates to a process for forming **capsules** comprising steps of (1) forming a solution of an amino compound R<sub>1</sub>R<sub>2</sub>NC(X)N(R<sub>3</sub>)C(H)(EWG)OH (X = O, NR<sub>5</sub>; EWG = electron-withdrawing group; R<sub>1</sub>, R<sub>2</sub>, R<sub>3</sub>, R<sub>5</sub> = H, alkyl, cycloalkyl, aryl of heterocyclic group; R<sub>1</sub>, R<sub>2</sub>, and R<sub>5</sub> or R<sub>1</sub>, R<sub>2</sub>, and R<sub>3</sub> may together form a heterocyclic group) in a solvent; (2) forming a dispersion of a core material in the solution; (3) depositing the amino compound as a resin upon the surface of the core material to form **capsules**; and (4) optionally hardening and/or recovering the **capsules**, whereby steps (1) and (2) are executed in either order or simultaneously. Core materials can be aromatizing agent, flavoring agent, colorant, food supplement, fertilizer, herbicide, pesticide, medicament, bleaching agent, textile treatment agent, etc.

IC ICM B01J0013-06

ICS B01J0013-20

CC 38-3 (Plastics Fabrication and Uses)

ST amino compd **encapsulation**

IT Bleaching agents

Coloring materials

Dietary supplements



Drugs

Herbicides

Pesticides

(encapsulated materials)

IT Fertilizers

RL: MSC (Miscellaneous)

(encapsulated materials)

IT 108-78-1D, Melamine, reaction products with Me glyoxylate or methylglyoxylate methanol hemiacetal 922-68-9D, Methyl glyoxylate, reaction products with melamine 6994-46-3, Solvent Blue 59 19757-97-2D, GMHA, reaction products with melamine

RL: TEM (Technical or engineered material use); USES (Uses)

(encapsulated materials)

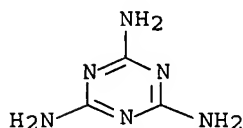
IT 108-78-1D, Melamine, reaction products with Me glyoxylate or methylglyoxylate methanol hemiacetal 922-68-9D, Methyl glyoxylate, reaction products with melamine 19757-97-2D, GMHA, reaction products with melamine

RL: TEM (Technical or engineered material use); USES (Uses)

(encapsulated materials)

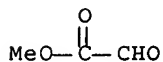
RN 108-78-1 HCAPLUS

CN 1,3,5-Triazine-2,4,6-triamine (CA INDEX NAME)



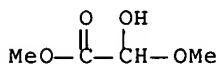
RN 922-68-9 HCAPLUS

CN Acetic acid, 2-oxo-, methyl ester (CA INDEX NAME)



RN 19757-97-2 HCAPLUS

CN Acetic acid, 2-hydroxy-2-methoxy-, methyl ester (CA INDEX NAME)



## RETABLE

Referenced Author (RAU)	Year (RPY)	VOL (RVL)	PG (RPG)	Referenced Work (RWK)	Referenced File
Kielbania, A	1993			US 5225278 A	HCAPLUS
Sebag, H	1989			US 4827003 A	HCAPLUS

L83 ANSWER 3 OF 14 HCAPLUS COPYRIGHT 2007 ACS on STN

AN 2004:823937 HCAPLUS Full-text

DN 141:314811

TI Condensation products of aminotriazines (especially melamine) and

oxocarboxylic acid derivatives, their use and method of manufacturing.

IN Fuerst, Christian; Schadenboeck, Michael; Jocham, Daniel

PA AMI Agrolinz Melamine International G.m.b.H., Austria

SO PCT Int. Appl., 34 pp.

CODEN: PIXXD2

DT Patent

LA German

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2004085506	A1	20041007	WO 2004-EP3178	20040325 <--
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
	RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	DE 10322107	A1	20041014	DE 2003-10322107	20030509 <--
	DE 10322107	B4	20050908		
	AU 2004224171	A1	20041007	AU 2004-224171	20040325 <--
	CA 2519167	A1	20041007	CA 2004-2519167	20040325 <--
	EP 1606331	A1	20051221	EP 2004-723188	20040325 <--
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK				
	CN 1764680	A	20060426	CN 2004-80008260	20040325 <--
	NO 2005004872	A	20051021	NO 2005-4872	20051021 <--
	US 2006276615	A1	20061207	US 2006-550861	20060816 <--
PRAI	DE 2003-10314478	A	20030326	<--	
	DE 2003-10322107	A	20030509	<--	
	WO 2004-EP3178	W	20040325		

OS MARPAT 141:314811

AB Condensation products of aminotriazines (especially melamine) and oxocarboxylic acid derivs. such as oxocarboxylic acid esters and semi-acetales, are prepared by formaldehyde-free method in solution (water, alc. or inert solvent at pH 3 - 10) or melt. Thus, heating a suspension containing 126 g of melamine, 360 g of acetic acid hydroxymethoxy-, Me ester in 250 g methanol 1 h at boiling temperature gave (after solvent removing) a condensation product soluble in alcs., water, acetone and esters. The resulting condensation products are very active in reactions of etherification, esterification, transesterification, amidation and hydrolysis (unlike the condensation products of melamine with glyoxylic acid) and could be useful instead of melamine resin in all ordinary applications.

IC ICM C08G0012-32

ICS C08G0073-06

CC 35-5 (Chemistry of Synthetic High Polymers)

IT 71-36-3DP, Butanol, reaction products with acetic acid, hydroxymethoxy-, Me ester-melamine copolymer 901-44-0DP, Simulsol BPLE, reaction products with acetic acid, hydroxymethoxy-, Me ester-melamine copolymer 4122-04-7DP, Aminotriazine, derivs., copolymer with oxocarboxylic acid derivs 7664-41-7DP, Ammonia, reaction products with acetic acid, hydroxymethoxy-, Me ester-melamine copolymer 632330-75-7DP, reaction products with NH<sub>3</sub>, water, and ethanol, 2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxy)]bis- 767350-93-6DP, reaction products with butanol

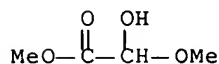
RL: IMF (Industrial manufacture); PREP (Preparation)

(condensation products of aminotriazine and oxocarboxylic acid derivs.)  
 IT 632330-75-7DP, reaction products with NH<sub>3</sub>, water, and ethanol,  
 2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxy)]bis-  
 RL: IMF (Industrial manufacture); PREP (Preparation)  
 (condensation products of aminotriazine and oxocarboxylic acid derivs.)  
 RN 632330-75-7 HCAPLUS  
 CN Acetic acid, hydroxymethoxy-, methyl ester, polymer with  
 1,3,5-triazine-2,4,6-triamine (9CI) (CA INDEX NAME)

CM 1

CRN 19757-97-2

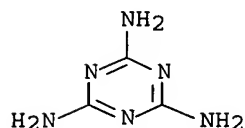
CMF C4 H8 O4



CM 2

CRN 108-78-1

CMF C3 H6 N6



# RETABLE

Referenced Author (RAU)	Year (RPY)	VOL (RVL)	PG (RPG)	Referenced Work (RWK)	Referenced File
Basf Ag	1989			DE 3724868 A	HCAPLUS
Chemie Linz Gmbh	1993			EP 0568865 A	HCAPLUS
Parekh, G	1983			US 4379911 A	HCAPLUS
Schibler, L	1971			US 3630998 A	

L83 ANSWER 4 OF 14 HCAPLUS COPYRIGHT 2007 ACS on STN

AN 2003:972064 HCAPLUS Full-text

DN 140:28654

TI Preparation of nitrogen-containing compounds and their application in  
 amino-aldehyde resin coating materials

IN Vermeulen, Jacobus Adriaan Antonius; Van Benthem, Rudolfus Antonius  
 Theodorus Maria; Kierkels, Renier Henricus Maria

PA DSM Ip Assets B.V., Neth.

SO PCT Int. Appl., 14 pp.

CODEN: PIXXD2

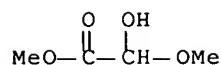
DT Patent

LA English

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI WO 2003101973	A2	20031211	WO 2003-NL399	20030528 <--

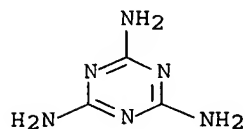
WO 2003101973 A3 20040318  
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,  
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,  
GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,  
LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM,  
PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT,  
TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW  
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,  
KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES,  
FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR,  
BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG  
NL 1020720 C2 20031215 NL 2002-1020720 20020530 <--  
CA 2487710 A1 20031211 CA 2003-2487710 20030528 <--  
AU 2003245175 A1 20031219 AU 2003-245175 20030528 <--  
EP 1507770 A2 20050223 EP 2003-738784 20030528 <--  
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,  
IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK  
CN 1659152 A 20050824 CN 2003-812646 20030528 <--  
JP 2006503930 T 20060202 JP 2004-509666 20030528 <--  
EP 1671986 A2 20060621 EP 2005-76970 20030528 <--  
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,  
IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, SK  
US 2005176916 A1 20050811 US 2004-516113 20041130 <--  
US 7199209 B2 20070403  
IN 2004CN02696 A 20060210 IN 2004-CN2696 20041130 <--  
NO 2004005723 A 20050228 NO 2004-5723 20041230 <--  
US 2007149753 A1 20070628 US 2007-707952 20070220 <--  
PRAI NL 2002-1020720 A 20020530 <--  
EP 2003-738784 A3 20030528 <--  
WO 2003-NL399 W 20030528 <--  
US 2004-516113 A3 20041130  
OS MARPAT 140:28654  
AB The title compds. R1R2NC(:NR5)N(R3)C(OH)HCO2R4 (R1-R3, R5 = H, alkyl,  
cycloalkyl, aryl of a heterocyclic group; where R1, R2, and R5 or R1, R2, and  
R3 may together form a heterocyclic group; R4 = C1-12 alkyl, aryl, aralkyl,  
cycloalkyl) are prepared by the reaction of an amino compound (e.g., melamine)  
with an alkanol hemiacetal (e.g., Me glyoxylate methanol hemiacetal) and are  
useful in the preparation of coatings, laminating resins, and adhesives.  
IC ICM C07D0251-54  
ICS C07C0275-16; C08G0012-38  
CC 42-10 (Coatings, Inks, and Related Products)  
Section cross-reference(s): 37  
IT 632330-75-7P  
RL: IMF (Industrial manufacture); PREP (Preparation)  
(preparation of nitrogen-containing compds. and their application in  
amino-aldehyde resin coating materials)  
IT 632330-75-7P  
RL: IMF (Industrial manufacture); PREP (Preparation)  
(preparation of nitrogen-containing compds. and their application in  
amino-aldehyde resin coating materials)  
RN 632330-75-7 HCAPLUS  
CN Acetic acid, hydroxymethoxy-, methyl ester, polymer with  
1,3,5-triazine-2,4,6-triamine (9CI) (CA INDEX NAME)  
CM 1  
CRN 19757-97-2  
CMF C4 H8 O4



CM 2

CRN 108-78-1

CMF C3 H6 N6



L83 ANSWER 5 OF 14 HCAPLUS COPYRIGHT 2007 ACS on STN

AN 2001:10673 HCAPLUS Full-text

DN 134:72058

TI Color improvement of dimethoxyethanal-melamine resins and composite articles

IN Floyd, William C.; North, Bernard F.

PA Clariant (France) S.A., Fr.

SO Eur. Pat. Appl., 9 pp.

CODEN: EPXXDW

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 1065227	A2	20010103	EP 2000-401756	20000620 <--
	EP 1065227	A3	20020731		
	EP 1065227	B1	20040901		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
	US 6201095	B1	20010313	US 1999-338219	19990622 <--
	JP 2001072732	A	20010321	JP 2000-184478	20000620 <--
	AT 275159	T	20040915	AT 2000-401756	20000620 <--
	PT 1065227	T	20050131	PT 2000-401756	20000620 <--
	ES 2225044	T3	20050316	ES 2000-401756	20000620 <--
PRAI	US 1999-338219	A	19990622	<--	

AB The addition of HCOH, relative to the C1-8-dialkoxyethanal with melamine, optionally polyol and hydrophobic modifier, before the reactants are acidified has been found to minimize the Gardner color number. Such dimethoxyethanal-formaldehyde-melamine resins have Gardner color 1; vs. dimethoxyethanal-melamine resins without formaldehyde having Gardner color 6-8.

IC ICM C08G0012-00

CC 35-5 (Chemistry of Synthetic High Polymers)

IT 315178-46-2P, Dimethoxyethanal-formaldehyde-melamine copolymer

315178-47-3P, Dimethoxyethanal-dipropylene glycol-glycerin

triethoxylate-formaldehyde-melamine copolymer 315178-48-4P,

Dimethoxyethanal-diethylene glycol-formaldehyde-melamine copolymer

315178-49-5P, Dimethoxyethanal-dipropylene glycol-formaldehyde-melamine copolymer

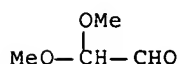
RL: IMF (Industrial manufacture); PRP (Properties); PREP (Preparation)

(dimethoxyethanal-melamine resins of low Gardner color number)  
 IT 315178-46-2P, Dimethoxyethanal-formaldehyde-melamine copolymer  
 RL: IMF (Industrial manufacture); PRP (Properties); PREP (Preparation)  
 (dimethoxyethanal-melamine resins of low Gardner color number)  
 RN 315178-46-2 HCAPLUS  
 CN Acetaldehyde, dimethoxy-, polymer with formaldehyde and  
 1,3,5-triazine-2,4,6-triamine (9CI) (CA INDEX NAME)

CM 1

CRN 51673-84-8

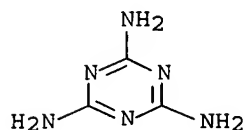
CMF C4 H8 O3



CM 2

CRN 108-78-1

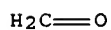
CMF C3 H6 N6



CM. 3

CRN 50-00-0

CMF C H2 O



L83 ANSWER 6 OF 14 HCAPLUS COPYRIGHT 2007 ACS on STN  
 AN 1998:562924 HCAPLUS Full-text  
 DN 129:290671  
 TI Non-formaldehyde thermosetting technology  
 AU Floyd, W. C.  
 CS Sequa Chemicals, Inc., Chester, SC, 29706, USA  
 SO INDA-TEC 97, International Nonwovens Technical Conference, Book of Papers,  
 Cambridge, Mass., Sept. 8-10, 1997 (1997), 21.0-21.14 Publisher:  
 INDA, Association of the Nonwoven Fabrics Industry, Cary, N. C.  
 CODEN: 66PLAM  
 DT Conference  
 LA English  
 AB A novel class of non-formaldehyde melamine resins has been developed. These  
 resins are aqueous-based and provide phys. properties comparable to PF and MF

resins in many applications in which they have been used as binders. These novel compns. are compatible with most aqueous PF and MF resins and have functioned as reactive extenders for these systems. A more advanced formulation has shown a synergistic improvement in tensile strength when extending a PF resin at 25%, as well as a significant formaldehyde scavenging effect, as measured by emissions testing at elevated temps. These novel aminoplast resins have been successfully evaluated in binder formulations for fiberglass, automotive filter media, other non-woven media and some graphics applications. In many instances these resins will allow a reduction in formaldehyde emissions while maintaining or improving the phys. properties of the binder. Applications results, emissions testing and some of the chemical behind these resins will be discussed.

CC 37-3 (Plastics Manufacture and Processing)

Section cross-reference(s): 38

IT 175613-80-6, 2,2-Dimethoxyethanal-melamine copolymer

RL: PRP (Properties); TEM (Technical or engineered material use); USES (Uses)

(development and applications of nonformaldehyde thermosetting technol.)

IT 175613-80-6, 2,2-Dimethoxyethanal-melamine copolymer

RL: PRP (Properties); TEM (Technical or engineered material use); USES (Uses)

(development and applications of nonformaldehyde thermosetting technol.)

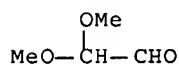
RN 175613-80-6 HCAPLUS

CN Acetaldehyde, dimethoxy-, polymer with 1,3,5-triazine-2,4,6-triamine (9CI)  
(CA INDEX NAME)

CM 1

CRN 51673-84-8

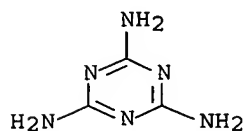
CMF C4 H8 O3



CM 2

CRN 108-78-1

CMF C3 H6 N6



#### RETABLE

Referenced Author (RAU)	Year (RPY)	VOL (RVL)	PG (RPG)	Referenced Work (RWK)	Referenced File
=====	+	+	+	+	+
Anon				EP 0698627 A1	HCAPLUS
Anon				EP 0698627 A1	HCAPLUS

Anon				US 4835320	HCAPLUS
Anon				US 4835320	HCAPLUS
Anon				US 5539077	HCAPLUS
Anon				US 5539077	HCAPLUS
Anon				US 5539077	HCAPLUS
Anon				US 5539077	HCAPLUS
Anon				WO 9617879	HCAPLUS
Anon				WO 9617879	HCAPLUS
Societe Francaise Hoech				Highlink DM data she	
Yoon, S	1985	17		Textile Chemist and	

L83 ANSWER 7 OF 14 HCAPLUS COPYRIGHT 2007 ACS on STN

AN 1997:440107 HCAPLUS Full-text

DN 127:69777

TI Multicomponent additives for water-containing building materials based on cement, lime, gypsum, anhydrite, and the like, and their use

IN Albrecht, Gerhard; Weichmann, Josef; Huber, Christian; Kern, Alfred Dr

PA SKW Trostberg AG, Germany; SKW Bauchemie GmbH

SO Ger. Offen., 9 pp.

CODEN: GWXXBX

DT Patent

LA German

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 19543304	A1	19970522	DE 1995-19543304	19951121 <--
	DE 19543304	B4	20050609		
PRAI	DE 1995-19543304		19951121	<--	

AB The additives contain 1-80 weight% water-soluble sulfonic acid-, carboxylic acid-, or sulfate group-containing cellulose derivative and balance a sulfonic acid- and/or carboxylic acid-containing vinyl (co)polymer and/or condensation product based on aminoplast-formers or aryl compds. and H<sub>2</sub>CO. The additives are used in an amount of 0.1-5 weight% (based on total dry weight). A mixture containing cement 1000 and water 200 g mixed with additive 0.27 and cellulose derivative 0.07 weight%, had weight (dry basis) 692.82 g, slump 167 mm, and water retention 97.4%, vs. 744.77, 182, and 78.8, resp. in the absence of additives.

IC ICM C04B0024-38

ICS C04B0024-26; C04B0024-30

ICI C04B0103-46

CC 58-3 (Cement, Concrete, and Related Building Materials)

IT 9003-08-1D, Formaldehyde-melamine polymer, sulfonated 9004-32-4

9004-35-7, Cellulose acetate 9005-22-5, Sodium cellulose sulfate

9032-43-3, Cellulose sulfate 9084-06-4, Formaldehyde-naphthalenesulfonic acid polymer sodium salt 143928-27-2, Sikament FF 86

191216-48-5D, sulfanilic acid-containing 191216-49-6 191428-42-9,

Melment F 4000 191428-53-2, Sikament 10

RL: NUU (Other use, unclassified); USES (Uses)

(in multicomponent additives for water-containing building materials based on cement, lime, gypsum, and anhydrite)

IT 191216-48-5D, sulfanilic acid-containing

RL: NUU (Other use, unclassified); USES (Uses)

(in multicomponent additives for water-containing building materials based on cement, lime, gypsum, and anhydrite)

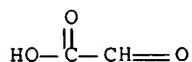
RN 191216-48-5 HCAPLUS

CN Acetic acid, oxo-, polymer with formaldehyde and 1,3,5-triazine-2,4,6-triamine (9CI) (CA INDEX NAME)

CM 1

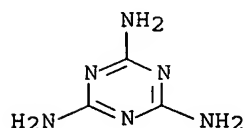


CRN 298-12-4  
CMF C2 H2 O3



CM 2

CRN 108-78-1  
CMF C3 H6 N6



CM 3

CRN 50-00-0  
CMF C H2 O



L83 ANSWER 8 OF 14 HCAPLUS COPYRIGHT 2007 ACS on STN

AN 1996:241909 HCAPLUS Full-text

DN 124:262639

TI Aminoplasts as crosslinking agents for cellulose

IN Wilhelm, Didier; Blanc, Alain; Floyd, William C.

PA Societe Francaise Hoechst, Fr.

SO Eur. Pat. Appl., 12 pp.

CODEN: EPXXDW

DT Patent

LA French

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	-----	----	-----	-----	-----
PI	EP 698627	A1	19960228	EP 1995-401780	19950727 <--
	EP 698627	B1	19980304		
	R: CH, DE, ES, FR, GB, IT, LI				
	FR 2723742	A1	19960223	FR 1994-10186	19940822 <--
	FR 2723742	B1	19961115		
	ES 2113161	T3	19980416	ES 1995-401780	19950727 <--
	JP 08067729	A	19960312	JP 1995-233286	19950818 <--
	CA 2156573	A1	19960223	CA 1995-2156573	19950821 <--
	CA 2156573	C	20051018		
	US 5665851	A	19970909	US 1995-517568	19950821 <--
PRAI	FR 1994-10186	A	19940822	<--	

AB The title resins are prepared from melamine and/or glycouril, the aldehydes RCHO (R = dialkoxymethyl; 1,3-dioxan-2-yl or substituted derivs.), and, optionally, glyoxal. Refluxing 1.3 mol melamine with 3.9 mol (BuO)<sub>2</sub>CHCHO in aqueous iso-PrOH at pH 9 for 4 h gave 850 g mixture of N-(2,2-dibutoxy-1-hydroxyethyl)melamine and the corresponding di- and trisubstituted derivs.

IC ICM C08G0012-26

CC 37-6 (Plastics Manufacture and Processing)  
Section cross-reference(s): 28, 43

IT 175613-78-2P 175613-79-3P 175613-80-6P  
RL: IMF (Industrial manufacture); MOA (Modifier or additive use); PREP (Preparation); USES (Uses)  
(aminoplasts as crosslinking agents for cellulose)

IT 175613-78-2P 175613-80-6P  
RL: IMF (Industrial manufacture); MOA (Modifier or additive use); PREP (Preparation); USES (Uses)  
(aminoplasts as crosslinking agents for cellulose)

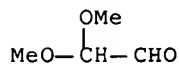
RN 175613-78-2 HCAPLUS

CN Ethanedial, polymer with dimethoxyacetaldehyde and 1,3,5-triazine-2,4,6-triamine (9CI) (CA INDEX NAME)

CM 1

CRN 51673-84-8

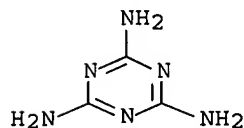
CMF C4 H8 O3



CM 2

CRN 108-78-1

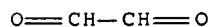
CMF C3 H6 N6



CM 3

CRN 107-22-2

CMF C2 H2 O2



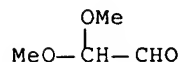
RN 175613-80-6 HCAPLUS

CN Acetaldehyde, dimethoxy-, polymer with 1,3,5-triazine-2,4,6-triamine (9CI)  
(CA INDEX NAME)

CM 1

CRN 51673-84-8

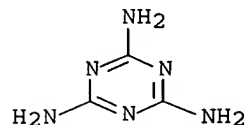
CMF C4 H8 O3



CM 2

CRN 108-78-1

CMF C3 H6 N6



L83 ANSWER 9 OF 14 HCAPLUS COPYRIGHT 2007 ACS on STN

AN 1994:84792 HCAPLUS Full-text

DN 120:84792

TI The use of condensation products of melamine and glyoxylic acid or their salts as additive in hydraulic binder compositions

IN Albrecht, Gerhard; Schwarz, Franz Thomas; Krammer, Johann

PA Chemie Linz (Deutschland) GmbH, Germany

SO Ger. Offen., 5 pp.

CODEN: GWXXBX

DT Patent

LA German

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 4217181	A1	19931125	DE 1992-4217181	19920523 <--
PRAI	DE 1992-4217181		19920523	<--	

AB The melamine/glyoxylic acid mol. ratio in the condensation products is 1:(2-4). The condensation products increase the flowability of hydraulic binders and the strength of the resulting building materials. Mortar containing 0.70 weight% condensation products (mol. ratio 1:3) gave 0-, 30-, 60-, 90-, and 20-min slump 190, 189, 187, 187, and 183 mm, and setting delay 3.0 h, vs. 163, 155, 149, 143, and 128 mm and 0 h, resp. for mortar not containing the condensation products. The 2-, 7-, and 28-day bending and compressive strength was 4.00, 6.94, and 8.58 and 16.4, 36.6, and 49.2, vs. 4.19, 6.06, and 7.85, and 20.4, 30.5, and 48.8 N/mm<sup>2</sup>, resp.

IC ICM C04B0040-00

ICS C04B0024-30

CC 58-1 (Cement, Concrete, and Related Building Materials)

IT 152383-84-1

RL: MOA (Modifier or additive use); USES (Uses)  
(plasticizer, for cement)

IT 152383-84-1

RL: MOA (Modifier or additive use); USES (Uses)  
(plasticizer, for cement)

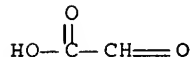
RN 152383-84-1 HCAPLUS

CN Acetic acid, 2-oxo-, polymer with 1,3,5-triazine-2,4,6-triamine (CA INDEX NAME)

CM 1

CRN 298-12-4

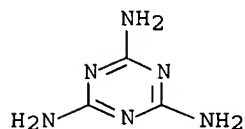
CMF C2 H2 O3



CM 2

CRN 108-78-1

CMF C3 H6 N6



L83 ANSWER 10 OF 14 HCAPLUS COPYRIGHT 2007 ACS on STN

AN 1994:61069 HCAPLUS Full-text

DN 120:61069

TI The use of condensation products of melamine and glyoxylic acid, and their salts, as additives for hydraulic binders and building materials

IN Albrecht, Gerhard; Schwarz, Franz Thomas; Krammer, Johann

PA Chemie Linz GmbH, Austria

SO Eur. Pat. Appl., 7 pp.

CODEN: EPXXDW

DT Patent

LA German

FAN.CNT 1

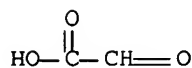
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 568865	A1	19931110	EP 1993-106515	19930422 <--
	EP 568865	B1	19970326		
	R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, NL, PT, SE				
	AT 9200937	A	19931215	AT 1992-937	19920508 <--
	AT 397958	B	19940825		
	AT 150740	T	19970415	AT 1993-106515	19930422 <--
	HU 67591	A2	19950428	HU 1993-1333	19930507 <--
PRAI	AT 1992-937	A	19920508	<--	

AB The melamine/glyoxylic acid mol. ratio in the additives is 1:(2-4), and the additives increase the flowability of the hydraulic binders and hydraulic binder-based building materials.

IC ICM C04B0024-28

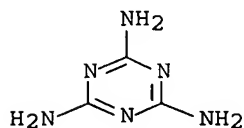
CC 58-1 (Cement, Concrete, and Related Building Materials)

IT 122753-47-3  
 RL: USES (Uses)  
 (hydraulic binders containing, for flowability)  
 IT 122753-47-3  
 RL: USES (Uses)  
 (hydraulic binders containing, for flowability)  
 RN 122753-47-3 HCAPLUS  
 CN Acetic acid, oxo-, sodium salt, polymer with 1,3,5-triazine-2,4,6-triamine  
 (9CI) (CA INDEX NAME)  
 CM 1  
 CRN 2706-75-4  
 CMF C2 H2 O3 . Na



● Na

CM 2  
 CRN 108-78-1  
 CMF C3 H6 N6



L83 ANSWER 11 OF 14 HCAPLUS COPYRIGHT 2007 ACS on STN  
 AN 1989:536415 HCAPLUS Full-text  
 DN 111:136415  
 TI Melamine-glyoxal and/or glyoxalic acid condensation product tanning agents  
 and adjuvants  
 IN Ebel, Klaus; Reuther, Wolfgang; Fikentscher, Rolf; Lach, Dietrich;  
 Streicher, Rolf; Schaffer, Ortwin  
 PA BASF A.-G., Fed. Rep. Ger.  
 SO Eur. Pat. Appl., 10 pp.  
 CODEN: EPXXDW  
 DT Patent  
 LA German  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 301406	A2	19890201	EP 1988-111752	19880721 <--
	EP 301406	A3	19900816		
	EP 301406	B1	19930922		
	R: AT, CH, DE, ES, FR, GB, IT, LI, NL, SE				
	DE 3724868	A1	19890209	DE 1987-3724868	19870728 <--

AT 94911	T	19931015	AT 1988-111752	19880721 <--
ES 2059449	T3	19941116	ES 1988-111752	19880721 <--
FI 8803526	A	19890129	FI 1988-3526	19880727 <--
AU 8820033	A	19890202	AU 1988-20033	19880727 <--
AU 597842	B2	19900607		
JP 01060699	A	19890307	JP 1988-185677	19880727 <--
US 4888412	A	19891219	US 1988-225366	19880728 <--
PRAI DE 1987-3724868	A	19870728	<--	
EP 1988-111752	A	19880721	<--	

AB The condensation product of melamine, glyoxal and/or glyoxalic acid (optionally in the form of their alkali salts), and, optionally, a phenolic compound or a compound with a reactive N group, is useful as a tanning agent or adjuvant. As a tanning adjuvant, this condensation product overcomes the problems of lightfastness and brown color of mimosa-Al tanning agents. It may be used at 4-20% (based on unhaired hide weight) and 20-50°, followed by an Al, Zr, or Ti mineral tanning agents (4-16%) at 20-45°. These steps may be interchanged. A 40% aqueous glyoxal solution and melamine were combined and heated for 15 min to 40°, producing a solution, which, upon cooling, had 40% solids content. This agent could be used either as a tanning agent or adjuvant.

IC ICM C14C0003-04

ICS C14C0003-28

CC 45-2 (Industrial Organic Chemicals, Leather, Fats, and Waxes)

IT 56-40-6DP, Glycine, reaction products with glyoxal-melamine copolymer  
 60-35-5DP, Acetamide, reaction products with glyoxal-melamine copolymer  
 64-18-6DP, Formic acid, reaction products with glyoxal-melamine copolymer  
 75-12-7DP, Formamide, reaction products with glyoxal-melamine copolymer  
 123-56-8DP, Succinimide, reaction products with glyoxal-melamine copolymer  
 142-73-4DP, Iminodiacetic acid, reaction products with glyoxal-melamine copolymer  
 660-68-4DP, Diethylamine hydrochloride, reaction products with glyoxal-melamine copolymer  
 2835-06-5DP, reaction products with glyoxal-melamine copolymer  
 14426-21-2DP, Diethanolamine hydrochloride, reaction products with glyoxal-melamine copolymer  
 28965-54-0P  
 122697-25-0P 122697-26-1P 122697-27-2P 122697-28-3P 122697-29-4P  
 122697-30-7P 122726-13-0P 122726-14-1P 122726-37-8P 122750-17-8P  
 122753-47-3P

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
 (tanning material, manufacture of)

IT 122753-47-3P

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
 (tanning material, manufacture of)

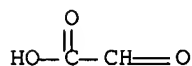
RN 122753-47-3 HCAPLUS

CN Acetic acid, oxo-, sodium salt, polymer with 1,3,5-triazine-2,4,6-triamine (9CI) (CA INDEX NAME)

CM 1

CRN 2706-75-4

CMF C2 H2 O3 . Na

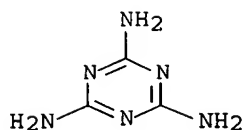


● Na

CM 2

CRN 108-78-1

CMF C3 H6 N6



L83 ANSWER 12 OF 14 HCAPLUS COPYRIGHT 2007 ACS on STN  
 AN 1976:181561 HCAPLUS Full-text  
 DN 84:181561  
 TI Storage stable, liquid finishes for textile materials  
 IN Bonnet, Jean C.  
 PA Manufacture de Produits Chimiques Protex, Fr.  
 SO Ger. Offen., 13 pp.  
 CODEN: GWXXBX  
 DT Patent  
 LA German  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 2534305	A1	19760212	DE 1975-2534305	19750731 <--
	FR 2280740	A1	19760227	FR 1974-27658	19740802 <--
	JP 51064097	A	19760603	JP 1975-93272	19750801 <--
PRAI	FR 1974-27658	A	19740802	<--	

AB The storage stability of aminoplast crease-proofing agents is improved when urea is condensed with HCHO in the presence of glyoxylic acid (I). Thus, a 50% aqueous solution (pH 2.9) containing urea 100, HCHO 700, and I 37 g was boiled 10 min, cooled to 45-50°, mixed with 100 g urea, and treated with 50% NaOH to give pH 6.5. The mixt was heated 3 hr at 50-60, cooled to 45°, and neutralized to pH 7.0. The clear colorless solution with solids content 45.3% and urea-HCHO-I ratio 1:2.8:0.07 had a 6 month shelf life. Cotton poplin treated with the solution had wrinkle recovery 185°, vs. 166° for a finishing agent prepared without I.

IC C08G; D06M

CC 39-10 (Textiles)

IT 59240-48-1

RL: USES (Uses)

(creaseproofing agents, for cotton textiles, with improved shelf life)

IT 59240-48-1

RL: USES (Uses)

(creaseproofing agents, for cotton textiles, with improved shelf life)

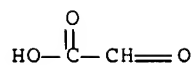
RN 59240-48-1 HCAPLUS

CN Acetic acid, oxo-, polymer with formaldehyde and urea (9CI) (CA INDEX NAME)

CM 1

CRN 298-12-4

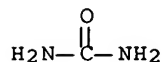
CMF C2 H2 O3



CM 2

CRN 57-13-6

CMF C H4 N2 O



CM 3

CRN 50-00-0

CMF C H2 O



L83 ANSWER 13 OF 14 HCAPLUS COPYRIGHT 2007 ACS on STN

AN 1975:444360 HCAPLUS Full-text

DN 83:44360

TI **Microcapsules**

IN Kiritani, Masataka; Ogata, Yasuhiro

PA Fuji Photo Film Co., Ltd.

SO Ger. Offen., 27 pp.

CODEN: GWXXBX

DT **Patent**

LA German

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 2434406	A1	19750206	DE 1974-2434406	19740717 <--
	JP 50028484	A	19750324	JP 1973-81624	19730717 <--
	JP 58013212	B	19830312		
	BE 817682	A1	19741104	BE 1974-146583	19740715 <--
	ES 428345	A1	19760716	ES 1974-428345	19740717 <--
	US 3981821	A	19760921	US 1974-489283	19740717 <--
	GB 1467478	A	19770316	GB 1974-31764	19740717 <--
PRAI	JP 1973-81624	A	19730717	<--	

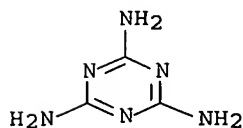
GI For diagram(s), see printed CA Issue.

AB **Microcapsules** with improved mech. stability, useful in carbon paper, pharmacol., etc., are prepared from an emulsion of oil droplets in a hydrophilic phase containing a capsule-forming component and a reactive component which promotes separation of the polymer from the continuous phase. Thus, a solution of 1 g crystal violet lactone and 0.5 g TDI trimer (I) [26603-40-7] (separation promoter) in 30 g isopropyl naphthalene is emulsified in a solution of Epomate N001 (II) 3, CM cellulose 2, poly(vinyl alc.) 2, and H2O 150 g at 15°, 3 g 47% HCHO is added slowly, and the mixture is stirred 4

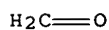


hr at 15° and heated to 40° to give copolymer [55492-66-5] microcapsules resistant to pressure and abrasion. In the absence of I, no encapsulation occurred.

IC C08L  
 CC 37-3 (Plastics Fabrication and Uses)  
 ST microcapsule sepn promoter; TDI trimer microcapsule sepn; tetraoxaspirodecandiamine deriv microcapsule; acrylonitrile deriv spirodiamine  
 IT Encapsulation  
     (of oils by plastics, separation promoters for)  
 IT Polyureas  
     RL: USES (Uses)  
     (polyamide-, microencapsulation by, separation promoters for)  
 IT Polyamides, uses and miscellaneous  
     RL: USES (Uses)  
     (polyurea-, microencapsulation by, separation promoters for)  
 IT Aziridine, homopolymer, reaction products with glyoxal  
     RL: USES (Uses)  
     (microencapsulation by, of oils, separation promoters for)  
 IT 107-22-2D, Ethanedial, reaction products with polyethyleneimine  
     9003-08-1 55492-66-5 55840-74-9  
     RL: USES (Uses)  
     (microencapsulation by, of oils, separation promoters for)  
 IT 643-79-8 25265-76-3 26603-40-7 50886-64-1  
     RL: USES (Uses)  
     (separation promoters, for microencapsulation of oils by plastics)  
 IT 9003-08-1  
     RL: USES (Uses)  
     (microencapsulation by, of oils, separation promoters for)  
 RN 9003-08-1 HCAPLUS  
 CN 1,3,5-Triazine-2,4,6-triamine, polymer with formaldehyde (CA INDEX NAME)  
  
 CM 1  
  
 CRN 108-78-1  
 CMF C3 H6 N6

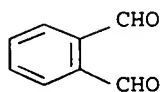


CM 2  
  
 CRN 50-00-0  
 CMF C H2 O



IT 643-79-8  
     RL: USES (Uses)  
     (separation promoters, for microencapsulation of oils by plastics)

RN 643-79-8 HCAPLUS  
 CN 1,2-Benzenedicarboxaldehyde (CA INDEX NAME)



L83 ANSWER 14 OF 14 HCAPLUS COPYRIGHT 2007 ACS on STN  
 AN 1971:23456 HCAPLUS Full-text  
 DN 74:23456  
 TI **Encapsulation** of hydrophilic liquid-in-oil emulsions  
 IN Hiestand, Everett N.; Jensen, Erik H.; Meister, Peter D.  
 PA National Cash Register Co.  
 SO U.S., 11 pp.  
 CODEN: USXXAM  
 DT **Patent**  
 LA English  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 3539465	A	19701110	US 1968-772447	19681008 <--
PRAI	US 1968-772447	A	19681008	<--	

AB In the title process, a coacervate solution of a wall-forming polymeric material is deposited around the hydrophilic water-in-oil emulsion particles and hardened. Thus, a water-in-oil emulsion was prepared by emulsifying a solution of 20 g urea in 10 ml water with 25 ml corn oil containing 0.25 g hydrogenated castor oil at 40°. A gelling sol was prepared by heating 10 g gelatin and 100 ml water at 40°, and this sol and the emulsion were heated to 40° and charged slowly in a confluent stream into 100 ml of a solution containing 20 g Na2SO4 at 40° with strong stirring. When phase separation was complete, the solution was cooled to 5° to gel the coacervate, adjusted to pH 9.5 with 10% NaOH solution, mixed with 10 ml HCHO solution, and allowed to stand 1 hr at 5°, giving a hardened coacervate which was separated from the mixture, washed, and spray dried at 80°. Other types of emulsion particles which can be **encapsulated** include plant growth hormones, pesticides, vitamins, pharmaceutical materials, and rodenticides. The addition of the anti-inversion agent to the oil phase prevents the inversion of the emulsion during coacervate deposition and processing.

IC A01N0017-00A; A61K0009-04B; B01J0013-02B  
 INCL 252316000  
 CC 37 (Plastics Fabrication and Uses)  
 ST **encapsulation** emulsion; emulsion **encapsulation**;  
 gelating **encapsulation** emulsion  
 IT Albumins, blood serum  
 Collagen, uses and miscellaneous  
 Fibrinogen  
 Gelatin, uses and miscellaneous  
 RL: USES (Uses)  
 (encapsulation by, of emulsions)  
 IT Emulsions  
 (encapsulation of)  
 IT Cod-liver oil  
 Corn oil  
 Hydrocarbon oils, uses and miscellaneous  
 Lanolin  
 Paraffin oils

Paraffin wax, uses and miscellaneous  
 Peanut oil  
 Safflower oil  
 Soybean oil  
 RL: PROC (Process)  
     (encapsulation of, in emulsions)

IT Coacervation  
     (in encapsulation, of emulsions)

IT Encapsulation  
     (of emulsions)

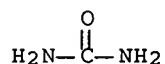
IT SeaKem 1  
 RL: USES (Uses)  
     (encapsulation by, of emulsions)

IT 9000-01-5, Gum arabic 9004-34-6 9004-38-0 9005-25-8, uses and  
 miscellaneous 9005-38-3 25300-64-5, uses and miscellaneous  
 30229-89-1, uses and miscellaneous  
 RL: USES (Uses)  
     (encapsulation by, of emulsions)

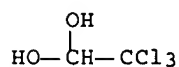
IT 56-81-5, uses and miscellaneous 57-13-6, uses and miscellaneous  
 57-55-6, uses and miscellaneous 58-08-2, uses and miscellaneous  
 64-17-5, uses and miscellaneous 83-79-4 302-17-0, uses and  
 miscellaneous 4403-90-1  
 RL: USES (Uses)  
     (encapsulation of, in emulsions)

IT 57-13-6, uses and miscellaneous 302-17-0, uses and  
 miscellaneous  
 RL: USES (Uses)  
     (encapsulation of, in emulsions)

RN 57-13-6 HCAPLUS  
 CN Urea (CA INDEX NAME)



RN 302-17-0 HCAPLUS  
 CN 1,1-Ethanediol, 2,2,2-trichloro- (CA INDEX NAME)



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